

## **REMARKS**

In the Final Action dated April 20, 2004, claims 1-17, 23 and 27-29 are pending and under consideration. Claims 1, 4-17, 23 and 27-29 are rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to satisfy the written description requirement.

Applicants submitted an Amendment under 37 C.F.R. §1.116 dated September 20, 2004, in which Applicants amended claims 8-10 and 27, and presented new claims 30-33. In conjunction with the amended claims, Applicants also submitted a Declaration of Dr. Grigliatti in support of Applicants' position that the claimed subject matter is adequately described in the specification. In particular, the Declaration demonstrates that the shuttle vector with Zeocin as a selection marker, which is specifically disclosed in the specification, can be adapted with other selection systems.

The Examiner issued an Advisory Action on November 1, 2004, stating that the §1.116 Amendment was not entered, allegedly because the Amendment raised new issues that would require further consideration and/or search; the Amendment did not materially reduce or simplify the issues for appeal; and the Amendment presented additional claims without canceling finally rejected claims.

More specifically, the Examiner alleges that new claim 30 recites "a cryptic promoter within said insect promoter", which raised new issues that would require further consideration and search.

Applicants respectfully submit that the subject matter of claim 30 is supported by the description at page 9, lines 22-23, and page 62, line 23 to page 63, line 2 of the specification, as well as by claim 2 as originally filed. No new matter is introduced by new claim 30.

Furthermore, the Examiner stated that Applicants' argument that the specification adequately describes the claimed subject matter is not convincing. Specifically, the Examiner contends that the description identified by Applicants on page 67, lines 20-21, fails to allow the skilled artisan to envision the detailed chemical structure of the encompassed genus of antibiotic selections. In addition, the Examiner stated that the Declaration of Dr. Grigliatti, showing other antibiotic selection schemes, is not convincing, since the information disclosed in the Declaration is not part of the specification and therefore does not remedy the lack of written description in the specification.

In response, Applicants respectfully submit that it is not necessary for Applicants to describe the chemical structures of antibiotic selection markers, such as phleomycin, hygromycin, and puromycin, as these markers are well-known selection markers in the art. The claimed invention is directed to shuttle vectors, which are characterized by a selectable marker coding sequence, linked to a promoter region comprising an insect cell promoter and a prokaryotic promoter. The selectable marker is expressed in insect cells and bacterial cells that are transformed with the shuttle vector, and confers a phenotype selectable in both insect cells and bacterial cells. The vectors of the present invention have the advantage of utilizing one selection marker that is effective for selection in both insect cells and prokaryotic cells. A shuttle vector containing a selectable marker, which confers resistance to a bleomycin/phleomycin-type of antibiotic, is merely a preferred embodiment of the present application. The specification clearly states on page 67, lines 20-21, that the shuttle vectors of the present invention can be adapted for use with a variety of antibiotic selection schemes other than zeocin selection. Thus, Applicants respectfully submit that the specification, as a whole, satisfactorily conveys to those skilled in the art that the claimed shuttle vectors are not limited

to zeocin, but can be adapted for use with other antibiotic selection schemes.

Applicants further respectfully submit that the Declaration of Dr. Grigliatti was not submitted to cure any deficiency in the specification, as Applicants consider the description of the specification to be adequate under 35 U.S.C. §112, first paragraph. Rather, the Declaration was submitted as evidentiary support for Applicants' assertion in the specification that the claimed shuttle vector can be adapted with selection systems other than zeocin. Notably, phleomycin, hygromycin and puromycin, which are markers employed in the shuttle vectors discussed in the Declaration, are all markers known to those skilled in the art at the time the present application was filed.

In view of the foregoing, it is respectfully submitted that the claimed shuttle vectors are adequately described in the specification in compliance with the written description requirement of 35 U.S.C. §112, first paragraph. Withdrawal of the rejection is therefore respectfully requested.

It is firmly believed that the subject application is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Xiaochun Zhu', with a stylized flourish at the end.

Xiaochun Zhu  
Registration No. 56,311

Scully, Scott, Murphy & Presser  
400 Garden City Plaza-STE 300  
Garden City, New York 11530  
(516) 742-4343  
XZ:ab